

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
PETER E. NIELSEN	ISIS-3070	8096
	EXAMINER	
	SCHULTZ, JAMES	
	ART UNIT	PAPER NUMBER
	1635 DATE MAILED: 01/15/2003	79
	PETER E. NIELSEN	PETER E. NIELSEN ISIS-3070  EXAMI SCHULTZ  ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

··		Application No.	Applicant(s)		
Office Action Summary		09/424,521	NIELSEN, PETER E.		
		Examiner	Art Unit		
	J. Douglas Schultz	1635			
	Th MAILING DATE of this communication app	ars on the cov r she t with t	h corr spond nce address		
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM					
THE I - External after - If the - If NC - Failur - Any I	MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply within the statutory minimum of thirty (30 ill apply and will expire SIX (6) MONTHS cause the application to become ABAND	be timely filed  O) days will be considered timely.  If from the mailing date of this communication.  DONED (35 U.S.C. § 133).		
1) 🖂	Responsive to communication(s) filed on 17 C	October 2002 .	·		
2a)□					
3)	·=				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>					
		s/aro ponding in the applicati	ion.		
	I)⊠ Claim(s) <u>21,23-27,31-34,38-41,45-48 and 52</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.				
	Claim(s) is/are allowed.				
·	6)⊠ Claim(s) <u>21,23-27,31-34,38-41,45-48 and 52</u> is/are rejected.				
•	7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers				
9) The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
	) $\square$ The translation of the foreign language pro- Acknowledgment is made of a claim for domesti	• •			
Attachmen	t(s)				
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Infor	nmary (PTO-413) Paper No(s) mal Patent Application (PTO-152)		

Application/Control Number: 09/424,521

Art Unit: 1635

## **DETAILED ACTION**

- 1. Applicants' request for reconsideration has been noted, and a response is as follows.

  Reconsideration of Applicants' arguments includes a reconsideration of Applicant's amendment filed January 10, 2002, which contains the base claims currently under consideration. The subject matter contained therein has been determined to constitute new matter as explained below; accordingly, **PROSECUTION HAS BEEN RE-OPENED**.
- 2. Rejections and/or objections not reiterated from the previous office action mailed

  October 17, 2002 are hereby withdrawn. The following rejections and/or objections are either newly applied or are reiterated and are the only rejections and/or objections presently applied to the instant application.
- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21, 23-27, 31-34, 38-41, 45-48, and 52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The claims as amended in Applicants' communication dated January 10, 2002 are drawn to a peptide nucleic acid (PNA) as generically depicted in claim 23, comprising nucleobases

Application/Control Number: 09/424,521

Art Unit: 1635

attached to a peptide-type backbone, wherein the structure of the PNA is defined by variables comprised of numerous substitutable moieties, wherein the moieties comprising the specific variables  $R_i$  and  $R_j$  may be taken separately or together, and are selected separately or together from the group consisting of alkyl, steroid, or lipid.

In the claims as originally filed, "each of R<sub>i</sub> and R<sub>j</sub> is, independently, a lipophilic group or an amino acid labeled with a fluorescent group; or R<sub>i</sub> and R<sub>j</sub>, together, are a lipophilic group". The generic recitation of a "lipophilic group" in the original claims does not provide sufficient support for the species alkyl, steroid, or lipid, as presented later in the amended claims.

Furthermore, while the paragraph on page 9 bridging to page 10 of the specification lists specific embodiments of said lipophilic group, said list contains no reference to steroid or alkyl groups. Thus, the specification as originally filed does not teach or fairly suggest that said lipophilic group may be composed of steroid or alkyl moieties as claimed in Applicants' amendment dated January 10, 2002, and their incorporation into the claims as amended constitutes new matter in the absence of evidence to the contrary.

The amendment filed January 10, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the reference that variables  $R_i$  and  $R_j$  may be taken separately or together, and are selected separately or together from the group consisting of alkyl, steroid, or lipid.

Applicant is required to cancel the new matter in the reply to this Office Action.

Application/Control Number: 09/424,521

Art Unit: 1635

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Douglas Schultz whose telephone number is 703-308-9355. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John L. LeGuyader can be reached on 703-308-0447. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

James Douglas Schultz, PhD January 14, 2003

ANDREW WANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600